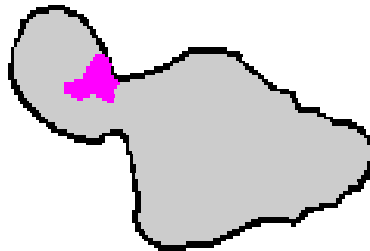


Department of Land and Natural Resources

Commission on Water Resource Management

Iao & Waihee Petition for Designation

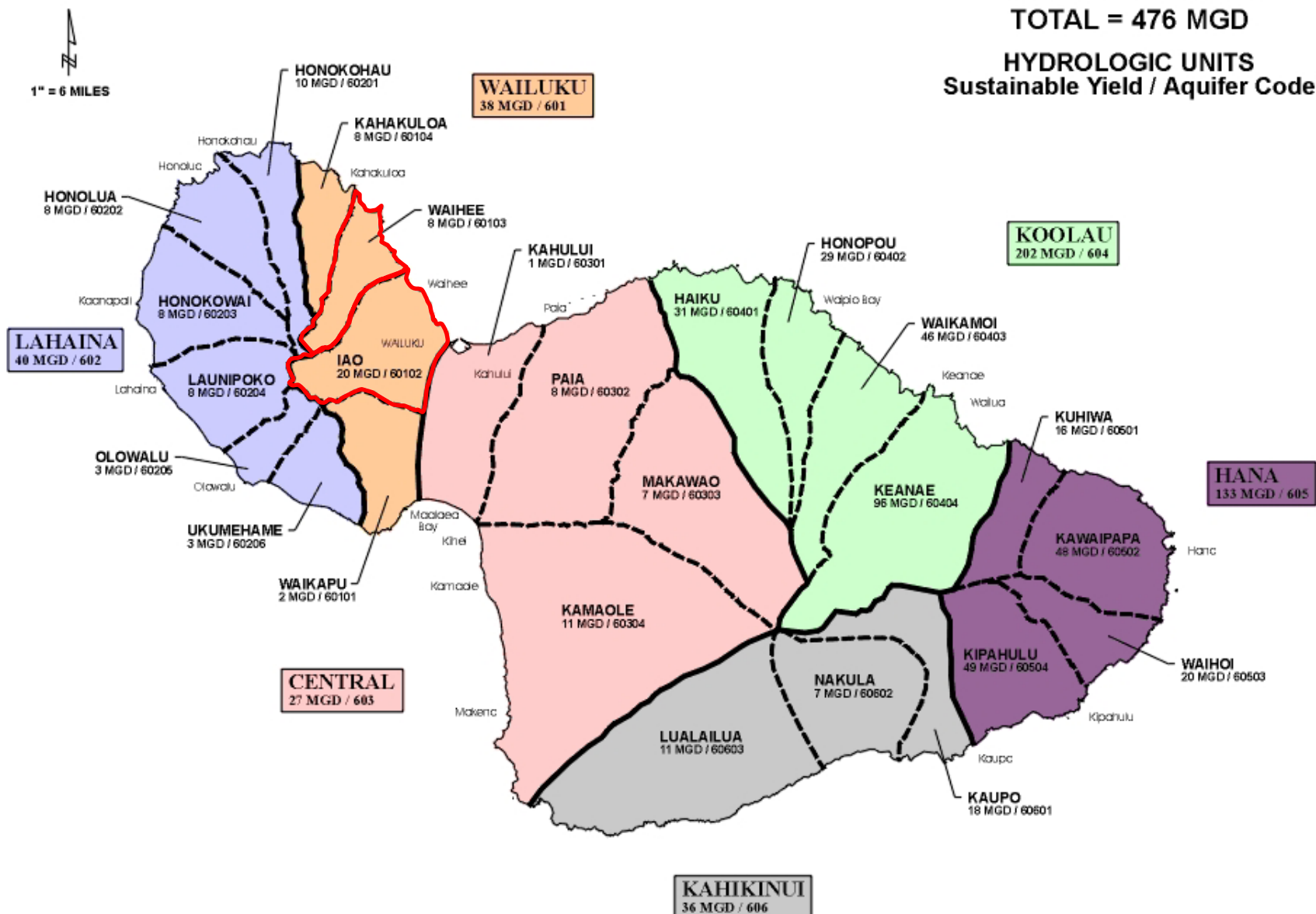


ISLAND OF MAUI

TOTAL = 476 MGD

HYDROLOGIC UNITS

Sustainable Yield / Aquifer Code





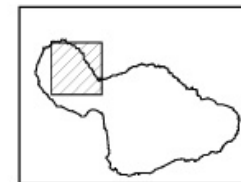
State of Hawaii
Department of Land and Natural Resources
Division of Water Resource Management

IAO & WAIHEE AQUIFERS

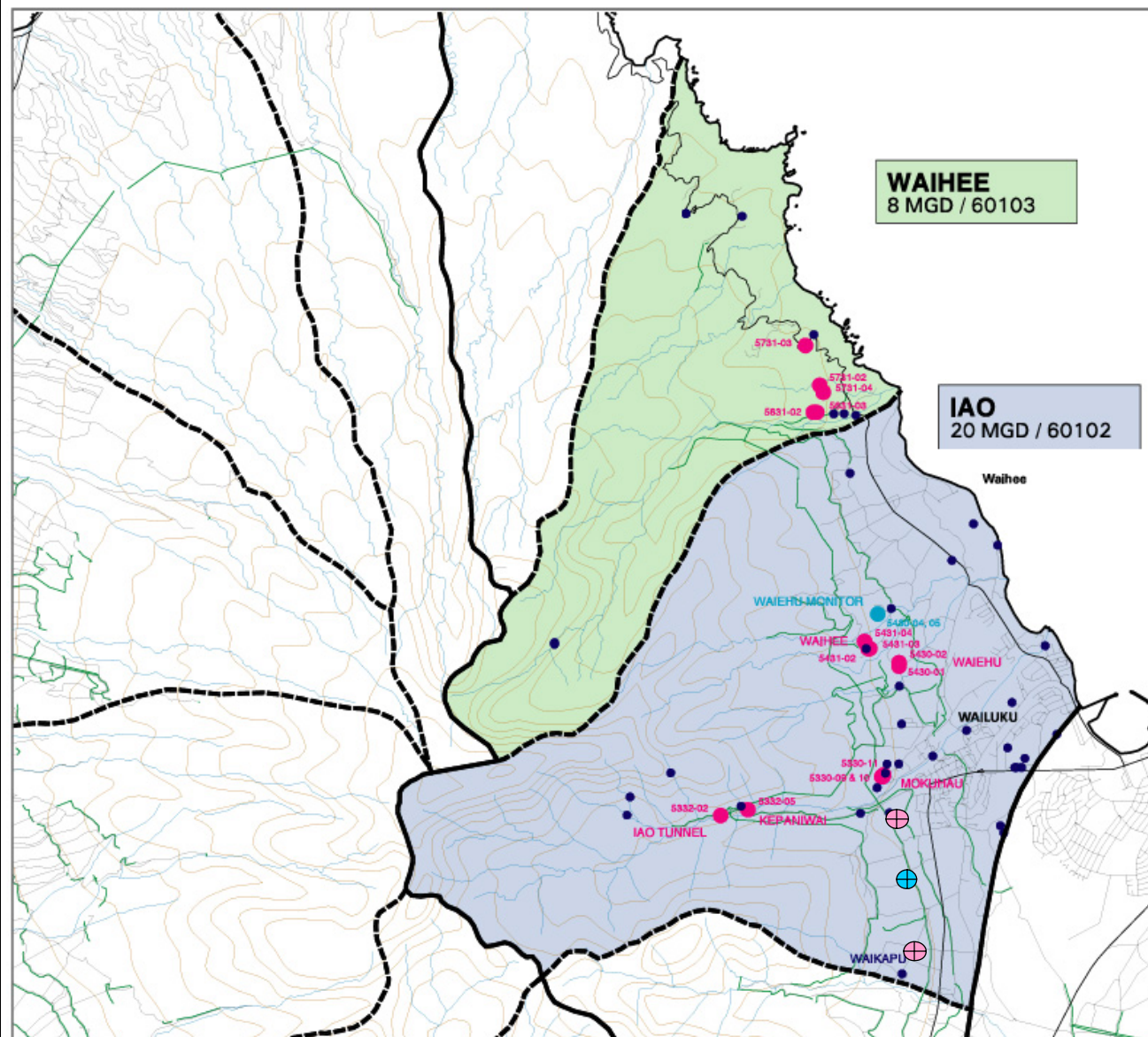


SCALE 1:70,000

- AQUIFER SECTOR BOUNDARY**
- AQUIFER SYSTEM BOUNDARY**
- OTHER WELLS**
- MAUI DWS WELL**
- MONITOR WELL**
- PERENNIAL STREAM**
- DITCH**
- MAJOR ROAD**
- ROAD**
- CONTOUR (500 FT INT.)**



LOCATION MAP



Iao Aquifer

Aquifer Code: 60102

Well No.	Well Name	Owner/User	12-MAV
5130-01	Waikapu 1	State DOWALD	
5130-02	Waikapu 2	State DOWALD	
5131-01	Waikapu Mauka	Maui DWS	
5229-01	Waiale Prototype	A&B (MAUI LANI)	
5230-01	Ka Hale A Ke Ola	Maui Econ Con	
5329-04	Memorial Gym	Maui Pks & Rec	
5329-05	Baldwin High Sch	Maui Pks & Rec	
5329-06	Baldwin High TH	Maui County	
5329-14	Maui Stadium	Maui DPW	
5329-17	Wailuku Arm	U S Army	
5330-01	Iao Tunnel	Wailuku Sugar	
5330-02	Iao Tunnel	HC & S Co	
5330-03	Field 63	Wailuku Sugar	
5330-04	Wailuku Mill TH	Wailuku Sugar	
5330-05	Wailuku Shaft 33	Hawaii Land And Farming	5.176
5330-06	Mokuahau TH 1	Maui DWS	
5330-07	Mokuahau TH 2	Maui DWS	
5330-08	Mokuahau TH 3	Maui DWS	
5330-09	Mokuahau 1	Maui DWS	2.121
5330-10	Mokuahau 2	Maui DWS	0
5330-11	Mokuahau 3	Maui DWS	2.907
5330-12	Puuhala TH-C	Wailuku Sugar	
5331-01	Iao Valley TH	Wailuku Sugar	
5332-01	Black Gorge Tun	Wailuku Sugar	

Well No.	Well Name	Owner/User	12-MAV
5332-02	Iao Tunnel	Maui DWS	1.154
5332-03	Field Gorge Tunn	Wailuku Sugar	
5332-04	Kepaniwai TH	State DOWALD	
5332-05	Kepaniwai	Maui DWS	
5333-01	Iao Needle Tunne	Wailuku Sugar	
5333-02	Iao Needle Tunne	Wailuku Sugar	
5429-01	TMK 3-4-29-31	De Iara J	
5429-02	Papohaku Park	Maui Pks & Rec	
5430-01	Waiehu Hts 1	Maui DWS	0.597
5430-02	Waiehu Hts 2	Maui DWS	0.838
5430-03	Waiehu TH-E	Wailuku Sugar	
5430-04	Waiehu TH-D	State DOWALD	
5430-05	Waiehu Monitor	State CWRM	
5431-01	Waiehu TH-B	Wailuku Sugar	
5431-02	Waihee 1	Maui DWS	1.837
5431-03	Waihee 2	Maui DWS	2
5431-04	Waihee 3	Maui DWS	1.525
5529-01	Waiehu TH	U S G S	
5529-02	Waiehu Golf	Maui Pks & Rec	
5530-01	Waiehu Tunnel	Wailuku Sugar	
5530-02	Waiehu TH	Wailuku Sugar	
5530-03	Waiehu G C 1	Maui Pks & Rec	
5530-04	Waiehu G C 2	Maui Pks & Rec	
5631-01	Waihee TH A1	Wailuku Sugar	

Waihee Aquifer

Aquifer Code: 60103

Well No.	Well Name	Owner/User	12-MAV
5434-01	Waihee Tunnel 1	HC & S Co	
5434-02	Waihee Tunnel 2	HC & S Co	
5631-02	North Waihee 1	Maui DWS	1.396
5631-03	North Waihee 2	Maui DWS	1.111
5631-04	Waihee	Marino-Lamanti	
5631-05	Waihee-Marino 1	Marino D	
5631-06	Waihee-Marino 2	Marino D	

Well No.	Well Name	Owner/User	12-MAV
5731-01	Mendes	Mendes E	
5731-02	Kanoa 1	Maui DWS	0.946
5731-03	Kupaa 1	Maui DWS	
5731-04	Kanoa 2	Maui DWS	
5832-00	Obyrne	Obyrne	
5832-02	Wailena	Island Shores	
5832-03	Kahakuloa Ag Sub	Island Shores	

Iao Aquifer



Iao & Waihee Background on Designation

- 1986 BLNR - Ground Water Control Area Proceedings (HRS 177)
- 1990 CWRM- Iao Ground Water Management Area Proceedings (HRS 174C)
- 1997 CWRM Iao Decision:
 - No designation
 - If 12-month moving average pumpage exceeds 20 mgd = designation
- 2001 New Public Petition - Iao & Waihee Aquifers
- November 2002 CWRM Trigger Decision

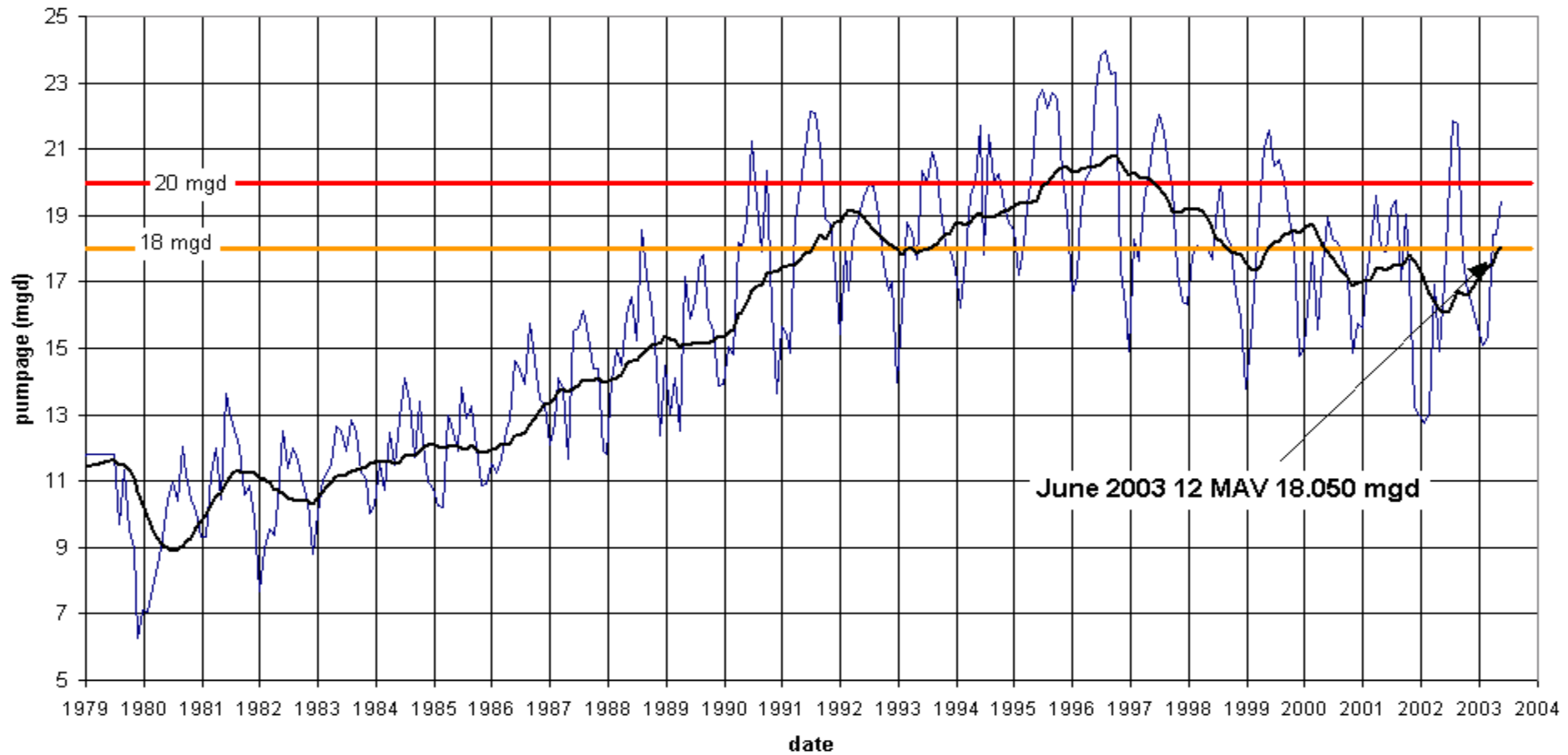


Iao & Waihee Background on Designation

November 2002 CWRM Trigger Decision

- [Designate Iao Aquifer System (60102)] if pumpage exceeds 90 percent of Iao sustainable yield = 18 mgd (based on 12-month moving average)
- [Designated Iao Aquifer System (60102)] If the mid-point in the transition zone from the Waiehu monitoring well in Iao Aquifer rises above the 680-foot level at any time designation would be automatic.
- Designate the Waihee Aquifer System (60103) if the water level based on the 12-month moving average for the Kanoa Test Hole falls below the 6-foot elevation at any time.
- Designate both the Iao & Waihee Aquifer Systems if the County does not produce a signed contract to develop a numerical model for managing the Iao and Waihee systems within 60 days from November 20, 2002.

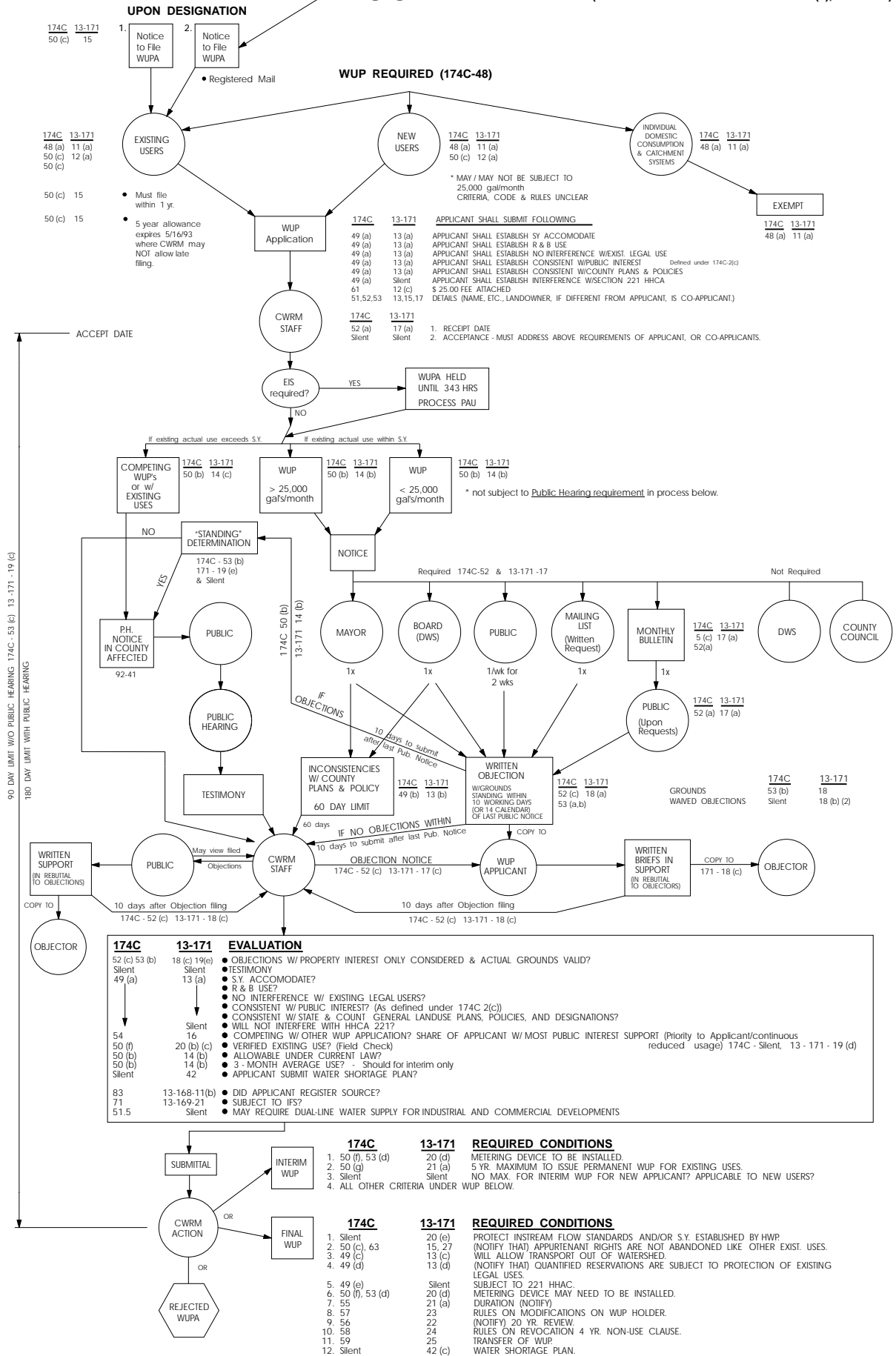
Total Iao Aquifer System Pumpage 1979 to 2003



WATER USE PERMIT PROCESS

DESIGNATED WMA

(EFFECTIVE DATE REQUIRED 174C-50 (c), 13-171-15)



Iao Aquifer



Iao Designation Next Steps

- **Public Notice (July 21, 2003).** All owners of wells that use ground water have 1 year to apply for a water use permit (**deadline is July 21, 2004**).
- Individual domestic users and catchment systems are exempted.
- Existing uses are determined before future uses are considered.
- Lengthy review that includes Mayor, Board of Water Supply, Public, registered mailing list & DWS and County Council comments.

Iao Aquifer



Iao Designation Next Steps (cont.)

- **Applications:** Single form. \$25 application fee (government agencies are exempted from fee). Applications available on website: <http://www.state.hi.us/dlnr/cwrn/forms.htm>
 - Well operator and well landowner must sign.
 - 8 criteria applicant must address:
 - a) Can be accommodated with the available water source.
 - b) Is a reasonable-beneficial use.
 - c) Will not interfere with any existing legal use.
 - d) Is consistent with the public interest.
 - e) Is consistent with state and county general plans and land use designations.
 - f) Is consistent with county land use plans and general policies.
 - g) Will not interfere with the rights of the Department of Hawaiian Home Lands.

2 issues



Iao Aquifer



Iao Designation Next Steps (cont.)

- **Applications (cont):**
- 2 Issues for county consideration:
 - The Commission relies heavily on the County Water Use and Development Plan (part of Hawaii Water Plan) for guidance
 - Does Maui County desire to verify that uses have appropriate zoning by signing WUP applications prior to completing an application to the Commission? (Oahu does this).



Iao Designation Next Steps (cont.)

- **Applications (cont):**
- Completed application timelines
 - 90-day decision deadline for action on applications with no objections
 - 180-day decision deadline for action on applications with objections (public hearings required in management area. Uses <25,000 gpd do not require public hearings even if objections)
 - Unknown case-by-case: All applications subject to contested case hearings if requested at the appropriate time.